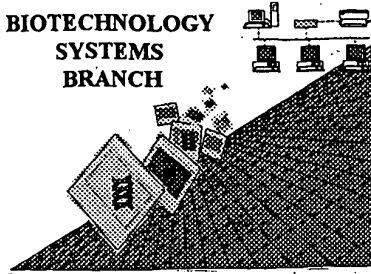


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/018,228
Source: P4/10
Date Processed by STIC: 1/9/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission

User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/018,228

DATE: 01/09/2002

TIME: 13:41:30

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\01082002\J018228.raw

**Does Not Comply
Corrected Diskette Needed**

5 <110> APPLICANT: Lex M. Cowser
 6 ISIS PHARMACEUTICALS, INC.
 8 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF G-ALPHA-S1 EXPRESSION
 W--> 9 <130> FILE REFERENCE: RTSP-0061
 10 <140> CURRENT APPLICATION NUMBER: US/10/018,228
 10 <141> CURRENT FILING DATE: 2001-12-12
 10 <150> PRIOR APPLICATION NUMBER: 09/344,914
 11 <151> PRIOR FILING DATE: 1999-06-25
 13 <160> NUMBER OF SEQ ID NOS: 87

ERRORED SEQUENCES

997 <210> SEQ ID NO: 87
 998 <211> LENGTH: 20
 999 <212> TYPE: DNA
 1000 <213> ORGANISM: Artificial Sequence
 W--> 1002 <220> FEATURE:
 1002 <223> OTHER INFORMATION: Antisense Oligonucleotide
 1004 <400> SEQUENCE: 87
 1005 atatttattt catttggttc
 E--> 1008 (1) delete

insert this mandatory numeric identifier whenever <221>, <222>, or <223> is shown (global error)

The types of errors shown exist throughout the Sequence Listing. Please check all sequences for similar errors.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/018,228

DATE: 01/09/2002

TIME: 13:41:31

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\01082002\J018228.raw

L:9 M:283 W: Missing Blank Line separator, <130> field identifier
 L:10 M:270 C: Current Application Number differs, Replaced Current Application No
 L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:142 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:152 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:162 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:173 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:183 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:193 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:203 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:213 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:224 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:234 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:244 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:254 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:264 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:274 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:284 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:294 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:304 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:314 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:324 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:334 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:345 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:355 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:365 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:375 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:385 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:395 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:405 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:415 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:425 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:436 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:446 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:456 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:466 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:476 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:486 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:496 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:506 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:517 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:527 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:537 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:547 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:557 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:568 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:578 M:258 W: Mandatory Feature missing, <220> FEATURE:
 L:588 M:258 W: Mandatory Feature missing, <220> FEATURE:

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/018,228

DATE: 01/09/2002

TIME: 13:41:31

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\01082002\J018228.raw

L:598 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:608 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:618 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:628 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:638 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1008 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:20 SEQ:87